STILETTO MARITIME DEMONSTRATION PROGRAM

Request for Information Pursuant to FAR Part 15.201(e)



CAPABILITY DEMONSTRATION 1

Hosted by the Stiletto Maritime Demonstration Program and the Navy Expeditionary Combat Command (NECC)

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A. Purpose

The purpose of this RFI is to solicit maritime related technology demonstration candidates from private industry, Government Research and Development (R&D) organizations and academia for inclusion in future Capability Demonstration events conducted by the Stiletto Maritime Technology Demonstration Program. The application deadline is October 5, 2012.

This Request for Information (RFI) is NOT a solicitation for procurement or other acquisition proposals, proposal abstracts, or quotations. The Government does not intend to award a contract on the basis of this RFI or to otherwise pay for the information solicited.

B. Background

Stiletto, a maritime demonstration platform, serves as a technology demonstration tool for industry, Government, and academic organizations. It provides an opportunity to learn and to improve systems as they function in an at-sea environment and raise a system's Technology Readiness Level (TRL). The Stiletto program's physical infrastructure consists of the high speed Stiletto craft with a Command Information Center (CIC), Launch and Recovery (L&R) for an 11M Naval Special Warfare (NSW) Rigid Inflatable Boat (RIB), arch space for sensor installation, flight deck for Unmanned Aerial Vehicle (UAV) L&R, and electronic network infrastructure with wide band satellite communications (SATCOM), along with an 11M NSW RIB with unmanned capability. Both the craft and its systems were designed to be flexible, modular, and re-configurable to enable near "plug-and-play" installation. The Stiletto crew includes engineers and technicians with expertise in multiple maritime technology areas. The crew can provide engineering assistance to integrate systems aboard the craft and to help develop demonstration plans to achieve technical goals.

The Assistant Secretary of Defense for Research & Engineering, Rapid Reaction Technology Office (RRTO) sponsors Stiletto for technology demonstrations. The Stiletto Maritime Demonstration Program and the Stiletto craft are managed by NSWCCD Combatant Craft Division. An Executive Steering Group oversees the demonstration program with participation from RRTO, NSWCCD, and the Naval Air Warfare Center Aircraft Division's Warfare Innovation Cell.

Industry, academia, and other Government organizations are invited to submit demonstration applications addressing innovative technologies leading to possible Government/Industry collaboration for further development of emerging warfighting capabilities. The intent of the Stiletto Maritime Technology Demonstration Program is to accelerate the delivery of innovative maritime technologies to the warfighter by demonstrating the capability and technology on the Stiletto platform.

Two types of cooperative demonstration events are conducted aboard Stiletto with representatives from other Government organizations, academia, and private industry. The first is a Capability Demonstration (CD). A CD is conducted in partnership with a host operational command or other Government organization. The second type is a Technology Demonstration (TD) event, which involves individual or multiple technologies, but may not

necessarily include an operational command or another Government organization. For both types of events, the demonstrator provides the technology/system to be demonstrated and the personnel to assist with integration and installation of the system. The demonstrator operates the system during the demonstration and uninstalls the system upon completion. The Stiletto staff provides personnel to coordinate and assist with integration of the system on the Stiletto craft and crew to safely demonstrate the system at sea. The Stiletto staff will not assist with engineering the demonstrated technology or system, except where design interfaces with the Stiletto are necessary. This RFI provides information for an upcoming CD. Additional information on Stiletto platform capabilities and Technology Demonstrations can be found on the Stiletto website: www.boats.dt.navy.mil/stiletto.asp

C. Capability Demonstration

Capability Demonstrations (CD) are conducted in partnership with a host warfighting command or Government organization selected by the Common Maritime Technology Working Group (CMTWG) based on requirements, needs and availability. The CMTWG is chartered by the Rapid Reaction Technology Office (RRTO) in the office of the Assistant Secretary of Defense for Research and Engineering (ASD R&E). The CMTWG facilitates delivery of technological and material solutions to the combatant craft Community of Interest (COI). The host command defines the focus areas, works with the Stiletto staff to select technologies for demonstration and coordinates execution of the Capability Demonstration with the Stiletto staff. A Capability Demonstration provides an opportunity for technology developers to interact with a specific operational command and/or other Government personnel to determine how their efforts and systems may support or enhance warfighter capability needs. Additionally, a CD allows technology developers to demonstrate the selected technology in a more realistic maritime environment provided by Stiletto. Capability Demonstrations normally include up to two weeks of underway time. Material solutions should be at a Technology Readiness Level (TRL) of 4 or greater for the purpose of Capability Demonstrations. Capability Demonstration events are scheduled quarterly by the Stiletto Executive Steering Group. Section D of this RFI describes application procedures for technology developers to demonstrate in a Capability Demonstration aboard Stiletto in November 2012. Additional RFIs will be released to FedBizOpps approximately 60 days prior to other scheduled Capability Demonstration events aboard Stiletto.

D. Capability Demonstration One - Naval Expeditionary Combat Command (NECC)

The Navy Expeditionary Combat Command (NECC), in partnership with the Stiletto Maritime Demonstration Program, will host a Capability Demonstration aboard Stiletto from 5-16 November 2012. NECC is a command element and force provider for integrated maritime expeditionary missions and core expeditionary force providing waterborne and ashore anti-terrorism, force protection, theater security cooperation and engagement, and humanitarian assistance/disaster relief contingencies. NECC mission areas include:

 Organize, man, equip, and train forces to execute combat, combat support, and combat service support mission across the spectrum of joint, combined, and multinational operations. These missions occur in the near-coast, inshore, and riparian environments and include irregular warfare and other shaping missions that secure strategic access and global freedom of action.

- Global force provider of military capabilities with maximum versatility across the widest possible range of engagements.
- Extend traditional Navy capabilities from blue water to green and brown water environments.

NECC demonstration capability areas will explore emerging technologies, technical applications, and their potential to provide solutions to improve situational awareness, ability to strike quickly and effectively, protection from environmental impacts, and other capabilities shown below in Table 1. Respondents are invited to submit technology demonstration applications related to these capabilities.

Capability	Capability Title	Capability Enabler(s)	
#			
1	Situational	Sensors/systems that provide:	
	Awareness	- High resolution imagery at maximum distances, (i.e.: EO/IR,	
		millimeter wave, radar, sonar, etc.)	
		- Enemy detection	
		- IED detection (maritime)	
		- Real time post processing of raw data to produce increased capability	
		of legacy sensors	
		- Lower power output/consumption	
		- Read and appropriately tag sensor output metadata	
		- Integrated bridge systems	
		- Integrated displays	
2	Strike	Stabilized platforms that can be used to mount:	
		- Weapon systems (M2, MK19, M240G, M249, etc.)	
		- Guided weapon systems	
3	Environment	Equipment/systems that provide improved protection for individuals from:	
		- Shock/vibration	
		- Vessel – incoming fire (projectile, shrapnel)	
		- Personnel – incoming fire (projectile, shrapnel)	
		- Cold/heat	
		- CBRN	
4	ISR	Systems/methods that provide the operator with the ability to rapidly and	
		accurately:	
		- Perceive the battlespace to include combat ID	
		- Automated data fusion from on and off board sensors	
		- Pass fused data to other craft or levels of command as required	
		- Query central database for local data/intel	
5	Unmanned	Improved and safer methods of launch and recovery for:	
	Systems	- Manned and unmanned air, surface and underwater systems	
		- L&R larger systems from smaller platforms	
		- (VTOL)	
6	Auxiliary	Logistics/maintenance management	
	Equipment	Craft monitoring system (engine, power, fuel, ammunition, etc.)	
7	Communication	Wideband Satellite	
		Integrated Communications	

Table 1: NECC Capability and Enabler Demonstrations - Capability Demonstration 1

After review of the demonstration applications, the Government may invite candidates to demonstrate their technologies aboard Stiletto during this NECC hosted Capability Demonstration event, or a future demonstration event. This NECC Capability Demonstration venue will provide an opportunity for the submitter to interact with NECC personnel for the purpose of NECC assessing potential impact of emerging technology solutions on NECC missions and capabilities. The intent is to accelerate the delivery of innovative capabilities. Industry participation in demonstration activities does not suggest or imply that NECC or NSWCCD or any government activity will endorse, procure, or purchase equipment.

There will be no live fire demonstrations for this Capability Demonstration with NECC.

DO NOT SUBMIT CLASSIFIED INFORMATION in the demonstration application.

DO NOT SUBMIT ACQUISITION PROPOSALS. Submit Demonstration Applications only. NECC Capability Demonstration applications must be submitted prior to 5 October 2012. No contracts will be awarded based solely on this announcement or any subsequent supplemental RFI announcements planned for the November 2012 Capability Demonstration event. Submission of a demonstration application does not guarantee an invitation to demonstrate.

E. SUBMISSION INSTRUCTIONS

Submit Stiletto Demonstration applications to the Stiletto Maritime Technology Demonstration Program electronically. Please go to www.boats.dt.navy.mil/stiletto.asp to download the application. The application submitted under this RFI shall be limited to 5 (five) pages. Applications shall be clearly marked with RFI # XXXXXX-XX-XXX-XXX. Responses to this RFI shall include an application that follows the example provided at the end of this document. The application shall be formatted to print as typewritten on single-sided paper with one-inch margins on all sides and 1.5-spaced text. 10-point font or larger with normal (uncondensed) spacing shall be used. All applications shall be submitted in the Portable Document Format (PDF) file format and shall be less than 2 MB in size. All applications will be submitted by directly uploading the PDF document to the FedBizOpps webpage for this RFI, and emailing Stiletto@navy.mil with the following information:

Subject: Stiletto Maritime Test Platform RFI XXXXXX-XX-XXX-XXX Application Company Name/Business Division/Address "Proposal Title" (include "Capability Demonstration" in the title) Primary POC info for the application: Name, email & phone number Date the application was uploaded to your directory.

You will receive an email within 2 business days verifying your application was received. If you need any assistance with application submittal please contact Ms. Leslie Simon.

Multiple nominations addressing different technologies may be submitted. Each application must address only one technology. Stiletto will provide venues, supporting infrastructure, and

¹ Application submissions that do not comply with these instructions for format may be excluded from the evaluation/selection process.

personnel for assessment (operational and technical), based on availability of resources. Costs specific to running the demonstrator's technology, as well as the demonstrator's travel costs will be at the demonstrator's expense.

F. SELECTION PROCESS AND BASIS FOR SELECTION TO PARTICIPATE

Capability Demonstration responses will be evaluated by an Integrated Product Team (IPT) consisting of Stiletto program, NECC, and CMTWG members. (See also Section I)

Selection of demonstrators to participate will be based on the extent to which the technology represents a particular class or level of capability that can be provided to interested commands. Other considerations include:

- Relevance to the capabilities described in Table 1
- Technical maturity
- Relevance of/or adaptability to military operations/missions
- Relevance to current operational needs

G. ADDITIONAL INFORMATION

Demonstrators shall assure that all proprietary information, documentation, and equipment is appropriately and clearly marked. Be advised that lessons learned from these demonstrations may be broadly disseminated within the Government.

Non-Government demonstrators aboard Stiletto will be asked to sign a Cooperative Research and Development Agreement (CRADA). The CRADA is the principal mechanism used by federal laboratories to engage in collaborative efforts with non-federal partners to achieve the goals of technology transfer. The CRADA, which is not an acquisition or procurement vehicle, is designed to be a relatively easy mechanism to implement, requiring less time and effort to initiate than other methods. The CRADA is also intended to take into account the needs and desires of private industry when commercializing a product such as the need for confidentiality and perhaps for exclusive rights to a product.

H. USE OF INFORMATION

The purpose of this notice is to gain information leading to collaboration for development of technology capabilities. All proprietary information contained in the response shall be separately marked. Any proprietary information contained in response to this request will be properly protected from any unauthorized disclosure. The Government will not use proprietary information submitted from any one firm to establish future capability requirements.

I. SPECIAL NOTICE

Demonstrator's attention is directed to the fact that Federally Funded Research and Development Centers (FFRDCs) or contractor consultant/advisors to the Government will review and provide support during evaluation of submittals. When appropriate, non-Government advisors may be used to objectively review a particular functional area and provide comments and recommendations to the Government. All advisors shall comply with procurement Integrity

Laws and shall sign non-disclosure and rules of conduct/conflict of interest statements. The Government shall take into consideration requirements for avoiding conflicts of interest and ensure advisors comply with safeguarding proprietary data. Submission in response to this RFI constitutes approval to release the submittal to Government support contractors.

J. Per Federal Acquisition Regulation (FAR) 52.215-3 Request for Information or Solicitation for Planning Purposes (Oct 1997):

- 1. The Government does not intend to award a contract on the basis of this RFI notice or to otherwise pay for the information.²
- 2. Although "proposal" and "demonstrator" are used in this RFI, your responses will be treated as information only. Responses shall not be used as a proposal.
- 3. The purpose of this RFI is to solicit maritime related technology demonstration candidates from private industry, Government Research and Development (R&D) organizations and academia for inclusion in future Capability Demonstration events conducted by the Stiletto Maritime Technology Demonstration Program.

FAQs

1. What is Stiletto's Mission?

The craft is a tool for industry, Government and academia organizations to install and prove their systems in a realistic military maritime environment. This is an opportunity to learn and improve systems as they function in a stressful environment while underway at sea. Additionally, working directly with the warfighter provides them the opportunity to learn about the mission capability your system provides as well as providing the demonstrator with valuable feedback.

2. Who manages and pays for Stiletto?

The Assistant Secretary of Defense for Research & Engineering, Rapid Reaction Technology Office (RRTO) sponsors Stiletto for demonstrations. The craft is in the custody of and is operated by NSWCCD Combatant Craft Division. An Executive Steering Group manages the demonstration program with participation from RRTO, NSWCCD, CMTWG and the Naval Air Warfare Center Aircraft Division's Warfare Innovation Cell.

3. Who pays for what?

The Stiletto program provides engineering assistance to integrate your system aboard the craft and develop a demonstration plan to achieve your technical goals. The crew, craft and fuel are provided by the Stiletto program to demonstrate your system at sea. The level of effort you provide while working with the Stiletto staff will determine the success of your demonstration.

² Except as an allowable cost under other contracts as provided in subsection 31.205-18, bid and proposal costs, of the Federal Acquisition Regulation.

4. Who are the authorized Government and non-Government third-parties that my information may be disclosed to?

The authorized Government and non-Government third-parties are either subject matter experts that are part of the application evaluation process or other DoD organizations working on similar projects.

5. What is the anticipated proposal review schedule? How will the applications be reviewed periodically?

Applications will be reviewed periodically until 5 October 2012. For Capability Demonstrations and/or Technology Demonstrations, the applications will be evaluated by members of the Stiletto ESG, the CMTWG and members of the host command, and may be approved or disapproved based on applicability and feasibility.

6. What Technology Readiness Level (TRL) is expected?

Material solutions should be at a Technology Readiness Level (TRL) of 4 or greater for the purpose of Capability Demonstrations. No specific TRL is targeted for Technology Demonstrations.

7. Can you provide specifications or technical information regarding Stiletto's infrastructure and equipment?

Important specifications or other technical information needed for an application can be found on the Stiletto website: http://www.boats.dt.navy.mil/stiletto.asp. Further technical questions may be requested through Stiletto@navy.mil.

8. What is the Common Maritime Technology Working Group (CMTWG)?

The CMTWG is chartered by the Rapid Reaction Technology Office (RRTO) in the office of the Assistant Secretary of Defense for Research and Engineering (ASD R&E). The CMTWG facilitates delivery of technological and material solutions to the combatant craft Community of Interest (COI). An emphasis is given to funding efficiency and elimination of redundancies in Science and Technology (S&T), Research, Development, Testing and Evaluation (RDT&E), and acquisition programs of record. The CMTWG consists of representatives from RRTO, USN, USCG, USMC and US Army commands with combatant craft assets. Additional CMTWG members may include US Combatant Command Staffs, Program Management Offices, as well as other Government agencies with approved operational requirements.

Appendix 1 Sample Application to Demonstrate Aboard Stiletto Maritime Demonstration Platform

Proposal Title: XYZ Demonstration (include "Capability Demonstration" or "Technology Demonstration" in the title)

Company / Command: Provide full name of company / command

POC: Provide name of person submitting proposal

Note: This application should be limited to five pages maximum including the cover page.

Proposal Title: XYZ Demonstration

INSERT PICTURE OF PROPOSED SYSTEM HERE

Company / Organization: Provide full name, address and other contact information for your organization. Include specific division if applicable.

Objective: Briefly describe demonstration goals.

Benefit to the Warfighter: Briefly describe the anticipated capability that the system provides to the warfighter. Additionally, describe why or how it is better than currently fielded systems (i.e. lighter, cheaper, faster, etc). If the capability does not currently exist in a fielded system, explain why the capability is needed. Specify if the system is a Program of Record or competing for an acquisition program. Skill

Benefit to the Demonstrator: Briefly describe the anticipated cost, schedule and technical risk to your program if Stiletto were not available. What would be the alternative method of testing / demonstration?

Baseline Demonstration Plan: Describe how you would like to demonstrate your system / product. Include specific items such as location (inland / littorals / offshore), sea state, winds, weather, day / night, etc. This can be revised as the planning matures.

Integration Requirements: Briefly describe the details of the proposed system integrated aboard Stiletto.

- Major System Dimensions:
- Estimated Total Weight:
- Power Requirement:
- Above deck installations: (i.e. antennas, mounts, brackets, cables, etc)
- Below deck installations: (i.e. transit cases, number of rack space units, cables, anticipated locations)
- Network Connections: (to shipboard network)
- Data requirement: From internet connectivity and currently installed shipboard sensors (GPS, AIS, Engine data, video).
- Restrictions: (i.e. cable length, conditioned space, etc)
- Anticipated number of personnel for demonstration:
- Hazardous materials:

Schedule: Briefly explain your desired schedule for integration / demonstration. Include primary / alternate dates for integration / demonstration.

Risk: Briefly explain potential risks of the system to Stiletto and personnel while integrated and demonstrated. This will assist the Stiletto staff ensure that appropriate risks are understood and incorporated into the vessels Risk Management Plan.

Metrics / Measures of Success: Briefly describe the specific metrics and/or measures of success proposed for the demonstration. These can be revised as the demonstration plan matures.

Deliverables:

- Application to Demonstrate aboard Stiletto (this completed form)
- o Drawings and technical information as required
- Post demonstration "Quick Look" report that details the specifics of the demonstration and outcome.

Demonstration Team: Include name, email, phone number, and complete address of key stakeholders / focal points, including:

- a. **Demonstration Lead:**
- b. Technical Lead:
- c. Team Members: